NR 445 Technical Advisory Group Meeting 8
November 14, 2000 Notes
Wood County Telephone Company Offices
Wisconsin Rapids WI

TAG Attendance: *Jim Beasom, Appleton Papers, Inc.; Dan Daggett, WI Bureau of Public Health; Robert Fassbender, (for Pat Stevens) WMC; Dave Gardner, Briggs & Stratton Corp.; Hank Handzel, WPC & PIW; John Hausbeck, Madison Public Health; Howard Hofmeister, Bemis Company; Brian Mitchell, WI Cast Metals Assoc.; Annabeth Reitter, StoraEnso (formerly Consolidated Papers, Inc); Sharon Schwab, League of Women Voters of the Wisconsin Rapids Area; Rudy Salcedo, City of Milwaukee Health (via conference phone); Pat Stevens, Wisconsin Transportation Builders Association; Ed Wilusz, Wisconsin Paper Council; Caroline Garber, WDNR; Jeff Myers, WDNR; Andrew Stewart, WDNR; Joe Ancel, WDNR*
Committee Attendance: *Renee Bashel, Dept. of Commerce; Myron Hafele, Kohler Co.; Robert Heitzer (via conference call); Beverly Miller, League of Women Voters of the Wisconsin Rapids Area; Chris Proctor, Free Flow; Jill Stevens, Alliant Energy; Tamera Witer, 3 M Company; Jeff Zeman, Kohler Co.*

Morning Session:

I. Welcome/Introductions/Agenda Review

Caroline Garber, Environmental Studies Section Chief

- Welcome and Introductions
  - Caroline Garber welcomed TAG and Toxics Committee members.
- Review of Meeting Notes
  - R. Heitzer made the correction that he was present at the Sept. 14th meeting. After review, the minutes showed him to be present, so no changes were made to the minutes.
- Review of Meeting Agenda –No additional agenda items were added

II. Exemption for Indoor Fugitives

- A. Stewart presented the history and purpose of the indoor air fugitive exemption. Currently NR 445 allows a source of indoor fugitive emissions of a carcinogen or a chemical having a reference concentration (RfC) to be exempt from control requirements provided: 1) the chemical is exhausted to the ambient air through general building ventilation; 2) the chemical has a TLV; and 3) the source is in compliance with applicable OSHA requirements. Indoor fugitive emissions of all other chemicals regulated by NR 445 are exempt regardless of the amount released to the ambient air from general ventilation sources. Originally, it was thought that if the air inside a workplace met OSHA requirements, then by the time that indoor air was exhausted to the atmosphere, there would be little likelihood that the concentration off the property would be above the value established to be protective of public health (2.4% of the TLV).

  Since the rule became effective in 1988, there have been situations where the definition and application of the indoor fugitive emissions exemption have not been clear. The Department's intent is to clarify that language in this rule revision. Some examples where application of the exemption has been questionable: a) process emissions released to indoor air – windows and overhead doors which are wide open and freestanding fans which are placed by openings to assist exhausting the air out of the building; b) pole barns where there are no permanent exterior walls; c) use of very large fans to move large volumes of air through a building where those fans are much larger than required for general building ventilation purposes, especially in circumstances that if the fans were turned off, the indoor air would become dangerous to breathe; d) in situations where the indoor air levels of a pollutant are high enough to require personal protective equipment in order to work in the work area.

  In the unofficial draft language, two changes are proposed: 1) a change in the definition of indoor fugitive emissions; and 2) an expansion of the requirement that the source is in compliance with applicable OSHA requirements to include all chemicals regulated by NR 445.

  - *Comment* - B. Fassbender stated that DNR doesn't have jurisdiction over OSHA. He also asked: "If company says that emissions are enclosed and do not get released to the ambient air, are they exempt?"
  - *Comment*- H. Hofmeister stated that he was confused about what the DNR was trying to get at here.

- *Comment* – R. Salcedo stated his concern was about indoor air fugitives affecting the ambient air of neighbors and the public. If we were to give a blanket exemption for emissions not coming from vents or stacks, it would seem like an open invitation to put emissions into outdoor air.
- *Response* – A. Stewart responded that some processes have high concentrations of chemicals in the workplace and if workers had to wear protective gear to meet OSHA requirements, these would be cases where the exemption should not apply.
- *Comment* – M. Hafele stated that if a source used something more than general ventilation, such as a barn fan, then these emissions were not fugitive emissions.
- *Response* – A. Stewart responded that some sources using such methods for increased ventilation have in the past sought to use this exemption.
- *Comment* – E. Wilusz stated he wasn't sure what exactly the department was trying to get at in this proposal.
- *Comment* – P. Stevens stated the term "practicably" in the rule is very difficult to interpret.
- *Comment* – J. Myers stated that the proposed definition of indoor fugitive is similar to that in the PSD rules. In the current version of NR 445, the term that is difficult to interpret is "general ventilation".
- *Comment* – H. Hofmeister stated that fugitive emissions were any emissions not specifically vented to a stack.
- *Comment* – H. Handzel stated that this language is a significant change from the current rule. The department seems to be trying to get into areas that are regulated by OSHA (the requirement that in order for indoor fugitives to be exempt from NR 445 requirements, the source would need to demonstrate compliance with OSHA requirements for that chemical). This will result in increased compliance costs. One possible fix might be to change the definition to "emissions inside a building".
- *Qu.* – A. Stewart asked what is meant by an overlap with OSHA requirements.
- *Ans* – H. Handzel said the issue is that there is an additional compliance requirement for all chemicals now (not just carcinogens as in the current rule). The showing for carcinogens was accepted by industry in the past, but the expansion to noncarcinogens is an issue. A lot of the NR 445 chemicals are not monitored for in the workplace and facilities don't test for all 600+ chemicals.
- *Response* – A. Stewart stated the department would like to be assured that a source's indoor air fugitives not result in exceedances of the ambient air standard. Currently, there is nothing to limit the amount of indoor fugitive non-carcinogens released to the ambient air.
- *Comment* – B. Fassbender stated that OSHA requirements are not in the department's jurisdiction.
- *Comment* – B. Mitchell stated that we need more research into on how companies currently document compliance with OSHA and related issues.
- *Comment*- B. Heitzer stated that this issue of OSHA compliance ties into the issue of MSDS sheets as well.
- *Comment* – P. Stevens and H. Handzel stated that extending the OSHA showing requirement to 400+ chemicals was a problem.
- *Comment* – C. Garber stated that we will find out what people are doing right now to comply with the showing for carcinogens.
- *Qu* – J. Beasom asked what OSHA requirements apply, those currently effective when the permit was issued, modified etc. or the most current requirements as they might exist 5 years later?
- *Comment* – B. Fassbender stated that one really has to find out how much additional work this proposal will entail.
- *Comment* – D. Daggett stated that he had been involved in many cases with facilities that have had problems due to fugitive indoor emissions. This is not acceptable. Citizens say "Prove to me that these chemicals are not above 2.4% of the TLV".
- *Comment* – M. Hafele commented that an inspector might ask for a demonstration for all 600+ chemicals.
- *Response* – A. Stewart stated that the department has been reasonable in the past.

III. Preliminary Draft of Revised Chapter NR 445

- C. Garber explained current staff thoughts as to the schedule for NR 445 revisions. At the December TAG meeting DNR staff would present proposals for many issues such as how to proceed with the issues of coal dust, wood dust, flour dust and diesel engine emissions. (Note: A proposal for addressing crystalline silica by establishing a special study is in the proposed rule language that will be discussed next.) In addition, some more information on how the NR 445 changes would affect other rules such as

the emissions inventory rules (NR 438) and permit rules (NR 406 and NR 407) would be presented. In January, the TAG would receive a revised draft of the rule proposal. The current target date is to present the rule package to the NR Board at the March 2001 meeting, then hold several public hearings.

- *Qu.* – B. Fassbender asked whether the January TAG meeting would include a discussion of previous drafts of the NR 445 proposal or if there would be a new NR 445 revised draft. WMC will have a tough time taking a position on the rule until it sees the "final package". He is not sure if the TAG will see the full picture until after the January 2001 TAG meeting. Until such time as WMC can see the whole picture, WMC will have to wait.
- *Ans.* – C. Garber stated that we will try to deal with as many issues as we can before we go to the NR Board.

- A. Stewart presented a handout with the preliminary draft of Chapter NR 445 concepts, titled: "Unofficial Administrative Code Language". He stated the purpose of this draft was to give everyone a picture of what the new rule would look like. The wording has not been "wordsmithed" and so this is just a preliminary view of how one might craft the rule according to concepts that have been discussed in the TAG and DNR staff recommendations.

  - The word "source" is highlighted to help identify how the term is used in the rule. The current rule may use the term to mean slightly different things (e.g., in one case it refers to an emissions unit, while in another case, it refers to the entire facility (which may have many individual emissions units)). The staff's intention is to make sure that the most specific or descriptive word is used in the revised rule.
  - There are clarifying notes in various places to explain what the rule means in more detail
  - Some redundant definitions are removed and others that are needed for clarification, such as the term "stationary source", are added to have the term readily available and not have to look up the cross-reference in a book of state statutes.
  - There are no significant changes proposed for the applicability section, but we are still examining the interface of the federal and state program requirements.
  - There is a revised definition of indoor fugitive emissions (see discussion earlier in the minutes)
  - Tables 1 through 5 in the current NR 445 are replaced with Table A, B, and C. Table A includes chemicals currently in Tables 1,3,4 and 5. Table B replaces Table 2. Table C is a new table which covers pharmaceuticals in much the same way that pesticides are covered in the current table 2 (proposed Table B).
  - There is a new NR 445.04 that applies to all sources (Table A). A statement that pollution prevention is encouraged to meet the rule requirements is added to the rule.
  - Pesticides and Pharmaceuticals are separated out in Tables B and C respectively and only facilities that manufacture, process, and treat or dispose of these chemicals are subject to the requirements for these chemicals. The definition of "manufacture, process, and treat or dispose" still needs to be added.
  - Language is needed to ensure that the current NR 445 requirements apply to sources in the period between the effective date of the rule revision and the compliance determination date.
  - "Good Wood Combustion" will be treated as a compliance demonstration. Significant work on this issue seems to suggest that it not be treated as an exemption, but rather as a compliance demonstration (i.e., that the source meets BACT).
  - *Qu.* – D. Gardner asked if the table (Table A) with thresholds for TLV based chemicals was in lbs/hr or lbs/24 hours?
  - *Ans.* – A. Stewart stated that the thresholds are in lbs/hr, averaged over the averaging time. This would be better clarified in the next version of the proposed language.
  - *Qu.* – D. Gardner asked where the modeling "off-ramp" comes in. Does it relieve you from needing a permit? Or with NR 445 only?
  - *Ans.* – A. Stewart said that most sources need a permit for reasons other than NR 445, but that is a consideration – language to clarify whether a facility needs a permit will be in the revised version of the rule language for NR 406 and 407.
  - *Comment* – D. Daggett noted that in Note 5 on p. 7 there appears to be a math error.
  - *Ans.* – A. Stewart stated that he will check on the math error.
  - A. Stewart explained that NR 445.06 (k) in the proposal (p. 8), ensured that once an RfC limit was complied with at a MACT affected source, the source was protected against additional requirements

resulting from any subsequent changes in the RfC. He stated that this is an existing provision, it is not proposed to be changed, and as best as could be determined, affects no sources at this time.

- *Comment* – A. Stewart then began to discuss compliance schedules (NR 445.06 (2), p. 8 in the Draft Code Language).
- *Qu.* – H. Hofmeister asked what happens if we change NR 445 next year. How do we change the rule? He suggested that we add a date field to the Tables to track each chemical's compliance date(s).

➢ A. Stewart explained how the compliance process would work using the handout titled: "Conceptual Compliance/Implementation Process for All Sources NR 445 Revisions"

- *Qu.* – B. Heitzer asked if facilities will need to report their emissions to NR 438 even though they are not subject to NR 445.
- *Response* – A. Stewart said they would, but that is no different from the current situation in the Air rules. Some sources have to report their emissions even though they are below the applicable thresholds in NR 445.
- *Qu* – D. Gardner asked if you would have to reenter a permitting process if you previously were below an NR 445 threshold, but now are above an NR 445 threshold. He would like to keep this administrative paperwork review out of the permitting process.
- *Response* – A. Stewart stated that we would not be re-reviewing past BACT/LAER decisions, so facilities that have complied with NR 445 previously, using BACT/LAER controls, would not be affected. However, sources newly subject to BACT/LAER would need a permit (or permit revision). Staff feel it is appropriate to have DNR review and approve BACT/LAER determinations prior to their implementation. We have highlighted these potential sources as a workload issue internally.

➢ A. Stewart then discussed the rule "mock-up" language in NR 445.07 9Variances) (page 9). He stated that the department received comments from DHFS that they should be involved in reviewing variance requests because there is a required showing that public/environmental health will be protected. This is added to the rule.

➢ A. Stewart presented the language for Hazardous Contaminant Review (NR 445.08). The department proposes to eliminate references to special studies that have been completed already and to establish a biennial process to update NR 445.

- *Qu.* – H. Hofmeister asked when compliance with multiple revisions of the rule have to be complete. When a permit is revised, does a source have to be in compliance with various provisions, or does it just need to have a compliance plan established in the permit?
- *Qu.* – P. Stevens asked if we really were intending to update the rule every 2 years. The timeframe seems to be too short.
- *Response* – C. Garber stated the wording here states that the department must conduct a review of changes to the lists every 2 years, but it does not say the rule needs to by updated every 2 years. Staff will consider what should be an appropriate time for updating the rules.

➢ A. Stewart presented the language for Hazardous Air Contaminant Special Studies (NR 445.09 in the "mock-up").

- *Qu* – D. Gardner asked whether crystalline silica is on the list or not.
- *Ans.* – A. Stewart stated that it is on the list. In this proposal, it is in a special study and it is exempted from having to show compliance until the results of the special study have been completed.
- *Qu* – S. Schwab asked whether a special study could be done on the impact of multiple chemicals on the same organ or toxic endpoint.
- *Ans.* – C. Garber suggested that this topic may not be amenable to being specifically addressed in NR 445 at this time.

➢ J. Myers discussed the hazardous air spill reporting requirements (NR 445.11 - p.11 of handout). The intent here is to make the NR 445 requirements clearer and more consistent with reporting requirements under the state statutes S. 292.11 and the current NR 706 rules (Hazardous Substance Discharge Notification).

- *Comment* –B. Heitzer asked to have the language be clear that the air spill notification for NR 445 is for stationary sources only.
- *Qu.* – H. Handzel asked if spill reporting requirements "kick in" right away?
- *Comment* - J. Ancel mentioned that the spills language should also consider NR 439 (which covers Malfunctions and Abatement), to make sure the requirements do not conflict.

- *Qu.* – M. Hafele asked how much to report and whether site-specific criteria (e.g., stack height, distance to fenceline, etc.) should be taken into consideration when determining the thresholds for reporting.
- *Qu.* – J. Beasom asked what if there are 3 different applicable thresholds for the same chemical.
- *Ans.* – J. Myers stated that staff intent was to have source report at the lowest of the 3 thresholds. The language in this section will be changed to reflect this.
-

➢ Caroline Garber described the meetings (Silica listening sessions) that DNR staff have held over the past few months on the Silica issue. Staff have met with industry, health and environmental groups to help identify the issues that should be addressed by a silica workgroup.

The listening sessions have resulted in an initial list of questions, including:

- What is silica? (e.g., amorphous vs. crystalline)
- How is it measured? (e.g., what particle sizes and what methods are available to measure concentrations in the air and to model emissions)
- What health effects are of concern and at what levels of exposure?
- What should the default threshold be for crystalline silica?
- What sources of silica should be regulated and how?
- What compliance determinations and monitoring should be required?
- What have other states done with silica?
- How do existing regulations (such as those by OSHA, MSHA, EPA (PM10 and PM 2.5, NR 415, etc.) already address emissions of silica?
- What are existing technologies for control of emissions? (Note: There are many industrial sectors that use silica)
- What subgroups need to be formed and whom do we need to involve to deal with issues specific to certain industries?
- How do we establish control requirements that do not create cross-media pollution problems (e.g., controlling air emissions by using vast amounts of water or causing point or non-point run-off problems or cause groundwater pollution)?
- How does one define a site or emission point? (e.g., if a portable source is located at a particular spot for one day, does that constitute a site, or does it have to be there for 30 days?; Also, who is the responsible party at construction sites – the contractor, the owner of site, etc.?)

IV. Wrap Up and Next Meetings

- The next meeting date was set (in a subsequent email to the TAG and Toxics Committee members) for **Monday, December 18th in Madison, from 9:30 a.m. to 3:30 p.m. in the North Hearing Room, 2nd Floor of the State Capitol**.
- There is also a TAG meeting scheduled for Wednesday, January 17, 2001 (location is yet to be determined).

Notes prepared by: Jeff Myers, Andrew Stewart, and Caroline Garber, Bureau of Air Management

DNR Staff Contact Information:

Name	Position	Phone	E-Mail
Caroline Garber	Environmental Studies Section Chief	(608) 264-9218	Garbec@dnr.state.wi.us
Andy Stewart	Environmental Engineer	(608) 266-5499	Stewaa@dnr.state.wi.us
Jeff Myers	Environmental Toxicologist	(608) 266-2879	Myersj@dnr.state.wi.us
John Roth	Air Dispersion Modeler	(608) 267-0805	Rothja@dnr.state.wi.us